Serial No.

10/509,702

September 30, 2004

Examiner: Jason Group Art Unit: 1746

Jason M. Heckert

Page 2 of 10

Filed:

## **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application.

## **Listing of Claims:**

1 (Currently Amended) A method for controlling the program of a washing machine comprising the following steps:

recording an amount of water supplied to a wash tub of the washing machine; determining an amount of free water present in the tub;

determining an amount of water absorbed by the load by subtracting the amount of free water from the amount of water supplied to the tub;

estimating a specific absorption of the load based on the water absorbed and on the free water,

calculating a load equivalent with based on the specific absorption and on the amount of water absorbed by the load, the load equivalent weight being related to the load in the machine and being used for controlling the program thereof.

2 (Currently Amended) The method according to claim 1, further comprising the steps of:

determining the difference of water levels in predetermined time intervals,

predicting future levels of water based on the determined differences, the future
levels being directly related to a predicted amount of free water;

estimating a predicted specific water absorption based on the predicted amount of free water;

calculating a predicted load equivalent weight based on the predicted future water level and said predicted specific water absorption, and

supplying an amount of water to the tub based on the predicted load equivalent weight.

Serial No. 10/509,702 Examiner: Jason M. Heckert

Filed: September 30, 2004 Group Art Unit: 1746

Page 3 of 10

3 (Previously Presented) The method according to claim 1, further comprising the step of checking if the total amount of water supplied to the tub is higher than a predetermined value, and the step of alerting a user accordingly.

4 (Previously Presented) The method according to claim 1, further comprising the steps of:

filling a known water amount to the tub, measuring a corresponding water level,

storing a difference value between a pressure reference value and the above measured value, and

using the stored value for compensating the measure of the free water amount.

- 5 (Previously Presented) The method according to claim 1 wherein an increase in speed vs. time for reaching a final spinning speed is selected according to the water level measured, the increase being lower when such water level is high.
- 6 (Previously Presented) The method according to claim 5, wherein the final spinning speed is reached in two or more steps, and the time interval between said steps is determined according to the measured water level, the time intervals being higher when the water level is high.
- (Currently Amended) A washing machine, configured to determine an amount of water supplied to the machine, the washing machine comprising a central processor unit and a continuous water level sensor connected to the central processor unit, this latter being adapted to determine an amount of water absorbed by a load by subtracting the amount of free water from the amount of water supplied to the tub, to estimate a specific absorption of the load based on the water absorbed and on the free water, and to calculate a load equivalent weight based on the specific absorption and on the amount of water absorbed by the load, the load equivalent weight being related to the load in the machine.

Serial No. 10/509,702 Examiner: Jason M. Heckert

Filed: September 30, 2004 Group Art Unit: 1746

Page 4 of 10

- (Currently Amended) The washing machine according to claim 7 wherein the central processor unit is further capable of determining a difference of water levels in predetermined time intervals, predicting future levels of water based on the above determined differences, such future levels being directly related to a predicted amount of free water, estimating a predicted specific absorption based on the predicted amount of free water, calculating a predicted load equivalent was based on the predicted future water level and said predicted specific water absorption, and supplying an amount of water to the tub based on the predicted load equivalent was a supplying an amount of water to the tub based on the predicted load equivalent.
- 9 (Previously Presented) The washing machine according to claim 7, wherein the central processor unit is provided with an alarm system that informs a user when the pressure valve measured by the continuous water level sensor is not within a predetermined range of values.
- 10 (Previously Presented) The washing machine according to claim 7, wherein the central processor unit is able to sum a predetermined number of consecutive pressure difference values measured by the continuous water level sensor, an alarm information being provided when such sum is below a predetermined value.
- (Previously Presented) The washing machine according to claim 7, wherein the central processor unit comprises an alarm system for detecting the trend of water level in the tub during washing and/or rinsing, the alarm system alerting a user when the decrease of water level vs. time is higher than a predetermined value, this condition being indicative of a water leakage.